Hight Speed Thermal Printhead (8dots / mm)

SE2004-DC90A

High speed, high quality, and high durability are achieved by using step free structure with high performance partial glaze and highly conductive overcoat layer. SE200*-DC90A series are lined up which can accommodate with all types of barcode labeling printers from Direct to Thermal Transfer, normal to high speed (over 300mm/s).

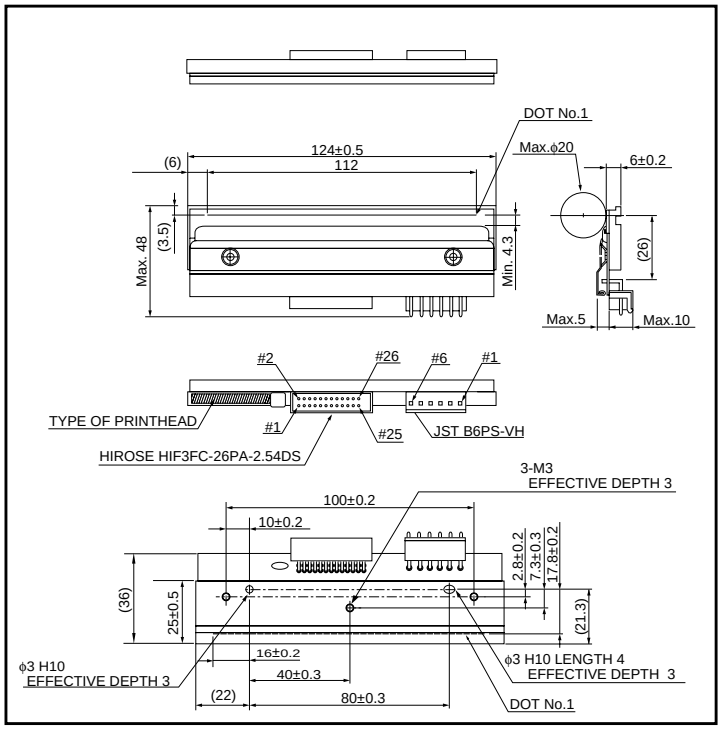
●Applications

Bar code label printers
Ticket printers
General purpose compact printers

●Features

1) ROHM new technology “STEP FREE” structure will provide, high corrosion resistance, better resistance against scratching damage, high efficiency.
2) Standard glazed components to accommodate thick paper.
3) High speed clock to facilitate external heat history control.
4) Using a hard conductive film as a protective film on the heating element offers excellent resistance to electrostatic damage.
5) Compatible with the 300dpi in mechanical specifications, to facilitate the making of a series of printers.

●External dimensions (Unit : mm)



Note: No heat history control function inside the thermal printhead. External heat history control is required for high speed printing.

●Characteristics

Parameter	Symbol	Typical	Unit
Effective printing width		112	mm
Dot pitch		0.125	mm
Total dot number		896	dots
Average resistance value	Rave	550	Ω
Applied voltage	V_H	24	V
Applied power	P_O	0.91	W/dot
Print cycle	SLT	0.42	ms
Maximum number of dots energized simultaneously		896	dots
Maximum clock frequency		10	MHz
Maximum roller diameter		20	mm
Running life / pulse life		50 / 1×10^8	km / pulses
Operating temperature		5 to 45	°C

●Pin configuration

HIROSE

No.	Circuit	No.	Circuit
1	GND	2	VDD
3	DI2	4	CLK(CP)
5	/LAT	6	/STB2
7	NC	8	DI1
9	/STB1	10	NC
11	TM	12	TM
13	SENS3	14	SENS2
15	SENS1	16	BEO
17	NC	18	NC
19	NC	20	NC
21	NC	22	NC
23	NC	24	NC
25	NC	26	NC

JST

No.	Circuit
1	COM
2	COM
3	COM
4	GND
5	GND
6	GND

●**Timing chart**

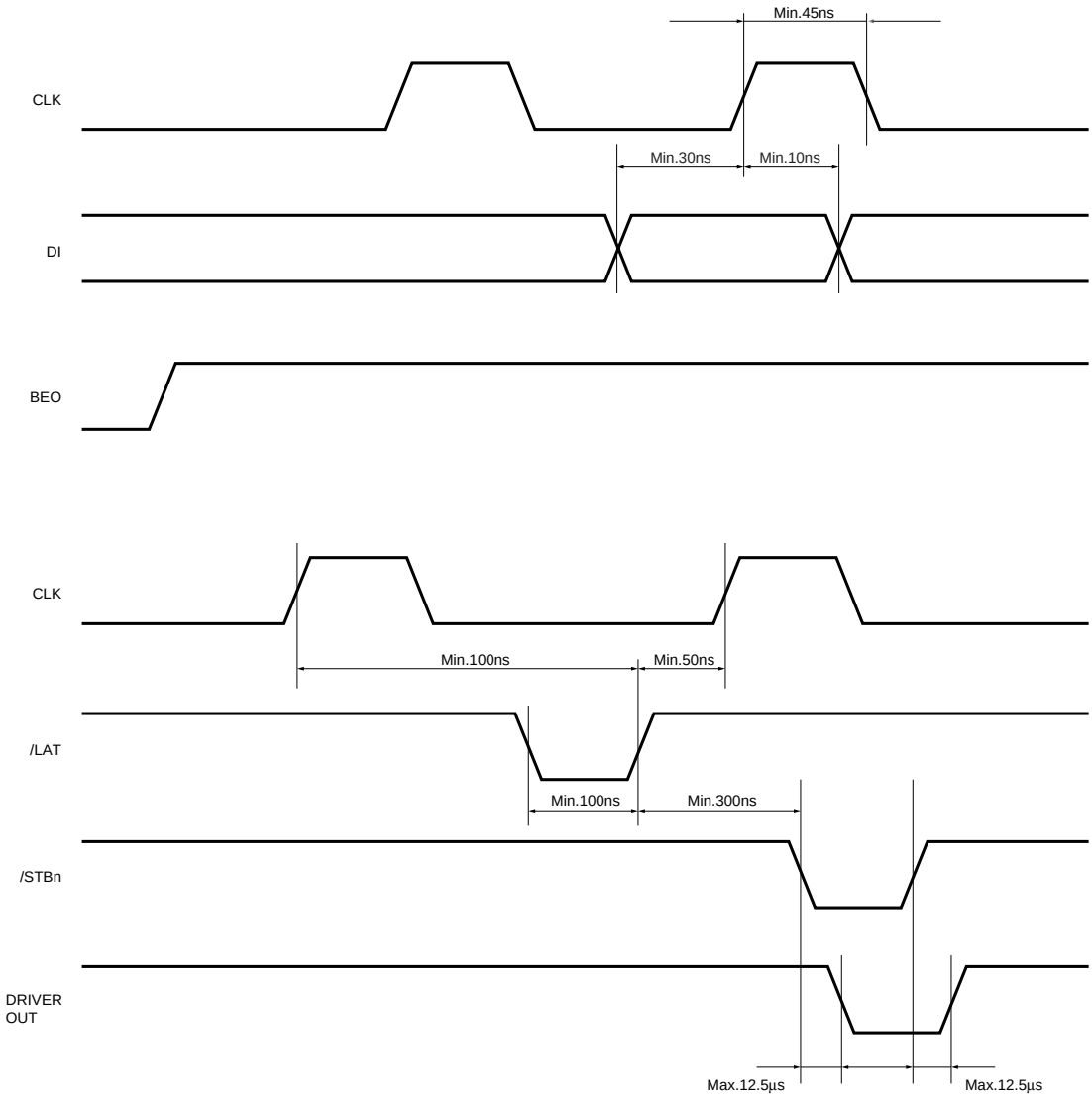
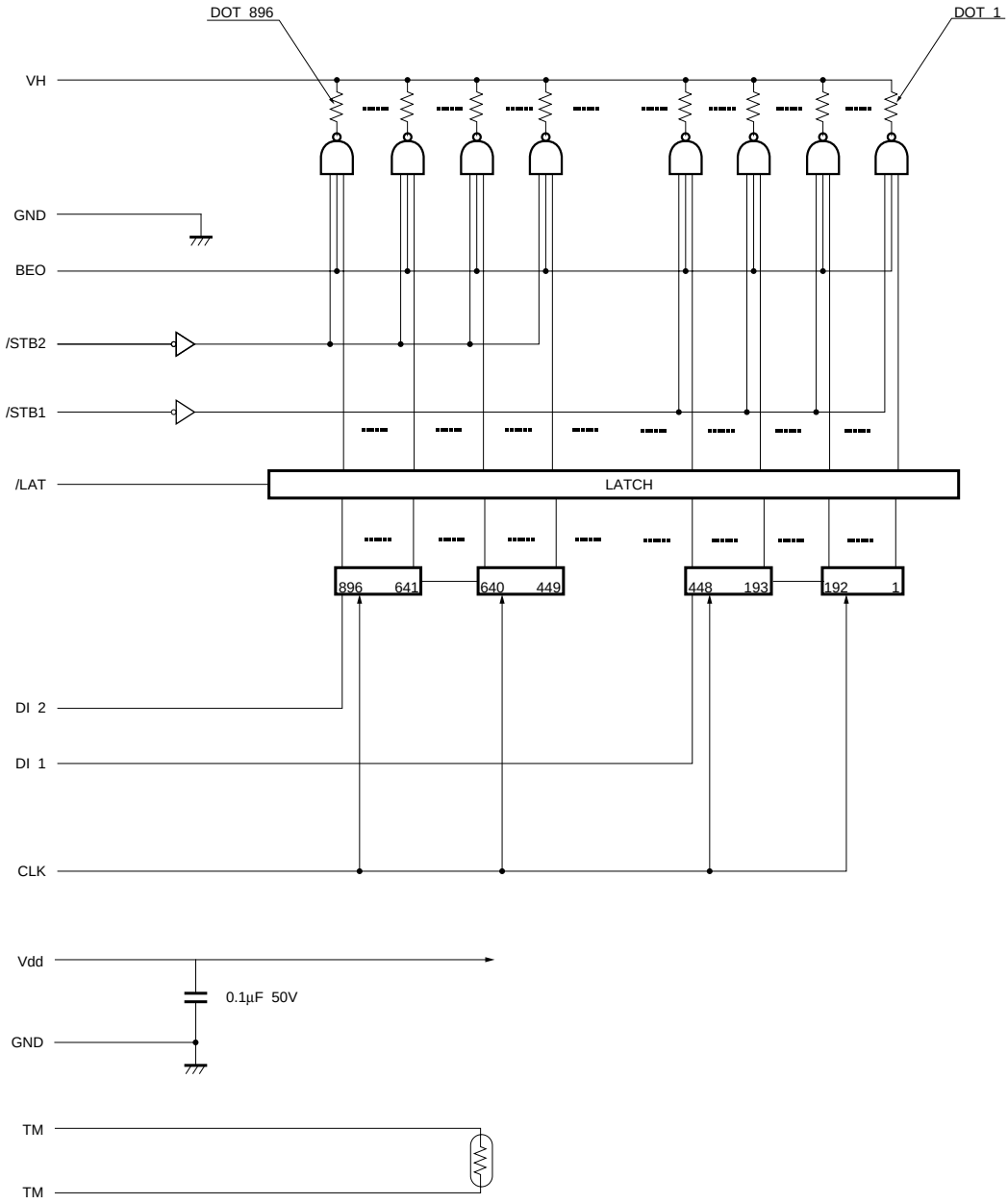


Fig.1

●**Equivalent circuit**



DI No.	DOT No.
DI 2	896～449
DI 1	448～ 1

/STR No.	DOT No.
/STB2	896～449
/STB1	448～ 1

Fig.2

●**Data sheet**

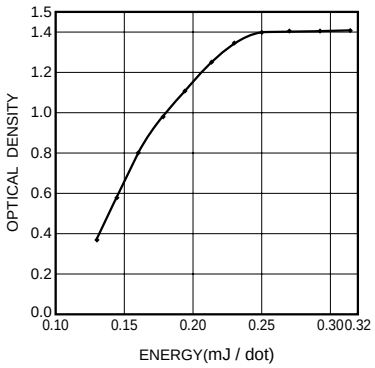


Fig. 3 Representative density curve

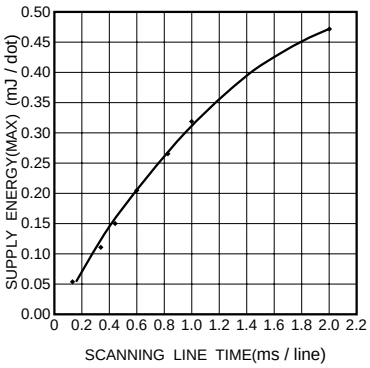


Fig. 4 Maximum energy curve

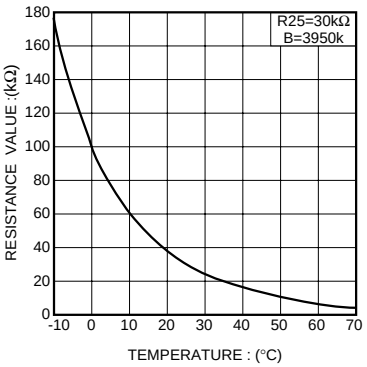


Fig. 5 Thermistor curve

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